

numbers, illegible words, or hand drawn circuits. Thus, it is unclear what corrections are being required. Clarification of the Examiner's drawing objection is requested prior to filing of a proposed drawing correction.

Specification:

The disclosure is being objected to because of the use of first person language therein. Also, during review of the specification, a grammatical error was located and is being corrected herein.

Please amend the specification as follows. A marked-up copy of these changes are attached with this communication and labeled as *Appendix A*.

Please amend the paragraph bridging pages 7-8 of the specification as follows:

Q1 -- A still further object of the present invention is to provide an apparatus engageable with a hand brake assembly on a railway vehicle which will substantially minimize the possibility of an operator improperly setting the hand brake by not applying enough torque thereby leaving such railway vehicle somewhat free to cause serious damage and/or possible injury to railroad personnel or, on the other hand, applying too much torque thereby possibly damaging the brake rigging of such hand brake.--

Please amend the paragraph bridging pages 15-16 and the paragraph bridging pages 16-17 of the specification as follows:

Q2 -- In the embodiments of the invention described above, it is expected that the capacity of the reservoir 18 should generally be in the range of between about 400 cubic inches and about 1,400 cubic inches. Preferably, such reservoir 18 will have a capacity of between about 400 cubic inches and above 700 cubic inches. It may be possible to use a smaller reservoir 18 because it is relatively easy to work valve 52 initially and the cam system 54 is going to increase the system efficiency, therefore, it will not require as much air in such reservoir 18. In other words, 700 cubic inches may be the worst case scenario based on the assumption that a 90 psi system is being used and the total amount of energy applied assumes every stroke of the cylinder went to full pressure in each stroke. Obviously, when one starts winding the chain (not shown) one will not need full pressure on the cylinder because it's going to be easy to wind up. Therefore, the cam 54 is going to cause it to reciprocate and return without reaching full pressure so it should not require a significant amount of air pressure.

For example, assume one has a charged reservoir 18 and everything is settling into a steady state where the cylinder piston 32 is completely returned by it's spring 34. Consequently, there is no air pressure behind the piston 32, and to start an application all that is required is to push the push button 44 attached to valve member 56 which begins the whole process. It allows air into reservoir 58. Reservoir 58 may or may not be a

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physical reservoir in the circuit. It could be, for example, a volume of the pipe. In any case, it allows air to pass from reservoir 18 into reservoir 58 which then operates (2) pilot operator valves 62 and 64. This moves valve 62 into the connected position and valve 64 is moved to a vented position. There is a direct connection 66 from the 700 cubic inch reservoir 18 which passes through the valve 64 to the timing reservoir 22. In this manner, the timing reservoir 22 is charged prior to starting. There are two power operated valves 68 and 72 which are shifted. Valve 72 is in the closed position to start with and valve 68 is in the connected position.--

Please amend the paragraph bridging pages ~~15-16~~ and the paragraph bridging pages 18-19 of the specification as follows:

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-- With push button 44 activated, valve 56 connects the 700 cubic inch reservoir 18 to reservoir 58 which causes valves 62 and 64 to shift. Now valve 64 starts reducing the pressure. The valve member 62 connects the 700 cubic inch reservoir 18 through to valve member 52. Valve member 52 is hooked to the reciprocating cam 54. When the piston 32 is in the home position it will be connected as shown in Figure 6, which means it's passing through the valve 68. Since there is pressure in the timing reservoir 22, the valve 68 will, also, be shifted to the right hand side and connected behind the piston 32. Now there is a complete path with the reservoir 18 through valve 62 and through valve 52 and through valve 68 to the

back side of the piston 32. With air flowing through the back side of the piston 32, the piston 32 is now driving the rack 74 down into the main drive gear 37 and causing the hand brake 20 to wind up. Once the piston 32 reaches the bottom of its stroke it's going to pick up a pin on cam 54 and the valve shifting mechanism is going to cause valve 52 to reciprocate. This will cause the valve member 52 to shift to a different position. Valve member 52 will then vent the air in the cylinder and the spring 34 is going to push the air back out of the cylinder or to atmosphere. When it gets almost to the top of its stroke, the cam 54 is going to pick-up again and shift valve 52 in the other direction, which is going to cause air to go back in the cylinder again. The apparatus 10 will continue this cycle until it gets the hand brake 20 completely wound up. It will require different amounts of air pressure in the cylinder to apply the brake at different stages of chain wind up. At the beginning of the application process it is going to be relatively easy, the pressure needed to extend the piston 32 will be rather low. The piston 32 is going to extend until it hits the cam and then the piston 32 is going to retract. The following strokes will require more and more pressure because the chain will become tighter and tighter. On the last stroke, the design of the gets almost to the top of its stroke, the cam 54 is going to pick-up again and shift valve 52 in the other direction, which is going to cause air to go back in the cylinder again. The apparatus 10 will continue this cycle until it gets the hand brake 20 completely wound up. It will require different amounts of air pressure in the

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cylinder to apply the brake at different stages of chain wind up. At the beginning of the application process it is going to be relatively easy, the pressure needed to extend the piston 32 will be rather low. The piston 32 is going to extend until it hits the cam and then the piston 32 is going to retract. The following strokes will require more and more pressure because the chain will become tighter and tighter. On the last stroke, the design of the system is to be no less than 40 psi starting from 90 psi, the initial condition, in a 700 cubic inch reservoir. This will ensure that with the size of the cylinder, the 40 psi will give enough input force into the rack in combination with the gear advantage. In the drawings, there is a pair of gears shown connected. Such gear advantage being achieved by a large main drive gear and a little drive gear that will provide a 4½ to 1 mechanical advantage in order to get the chain moving. So as long as there is 40 psi, a full load will be exerted on the chain.--

Claims:

Claims 1-30 are rejected under 35 USC 112, second paragraph as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Particularly, with respect to claims 1, 18 and 30, the Examiner states that it is unclear whether Applicant is claiming the combination of an apparatus for automatically applying at least one brake means and a hand brake assembly of the subcombination of